

M23 Power Connectors • P30 Series SF

Technical Data

Mechanical data:

Housing material:	Machined component: copper-zinc alloy (CuZn), die-cast part: zinc (GD-Zn)
Housing surface:	Nickel-plated; panel mounting connectors / receptacles: nickel-plated/thick-film passivated (can be overpainted)
Insulating body:	Polyamide (PA 66)
Contact material:	Copper-zinc alloy (CuZn)
Contact surface:	Nickel-plated (Ni) with gold layer (Au)
Contact connection type:	Crimp version
Gasket and O-ring:	Fluorine rubber (FPM)
Ambient temperature:	-20°C up to +125°C
Cable entry:	Cable connectors and cable connecting receptacles for external cable diameters of 7.5 – 18 mm, shielded
Locking method:	M23 screw locking
Mechanical insertion/ withdrawal cycles:	Standard: 50, stamped-rolled C-HC crimp contacts: up to 10,000
Degree of protection:	IP67 in locked state
Approvals:	An overview of the listed connectors for UL, cUL and VDE is available upon request.

Electrical data:

Number of positions	6	(5 + PE)	8 (4 + 3 + PE)	
Contacts		5 + PE	4 + 3 + PE	
Contact Ø	[mm]	2	1	2
Conductor cross section				
Short version, cable Ø max. 14 mm	[mm ²]	0.25-2.5	0.08-1.0	0.25-2.5
Long version, cable Ø max. 18 mm	[mm ²]	0.25-4.0	0.08-1.0	0.25-4.0
Panel mounting connector (receptacle)	[mm ²]	0.25-4.0	0.08-1.0	0.25-4.0
Nominal current per contact at 25 °C ¹⁾	[A]	30	9	30

Data according to DIN EN 61984:2001

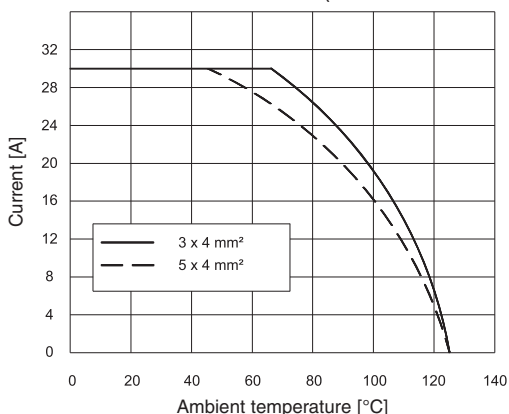
Nominal/rated voltage	[V AC / DC]	630 ²⁾	250	630 ²⁾
Test/surge voltage	[kV]	6	4	6
Surge voltage category		III		III
Contamination class ³⁾		3		3
Installation altitude	[m]	up to 3000		up to 3000

1) The effective current carrying capacity is to be determined via a derating curve depending on the application, if necessary.

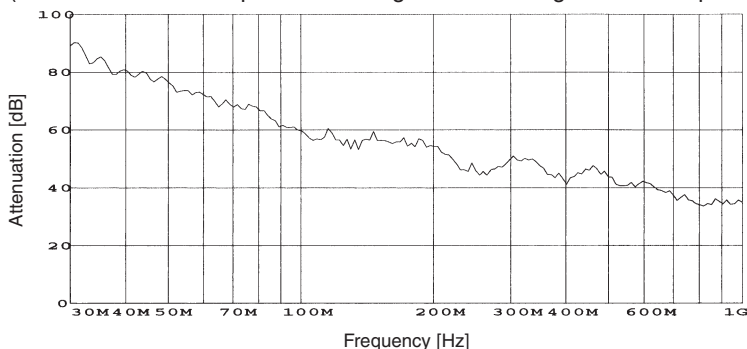
2) 400 V with stamped-rolled C-HC contacts

3) The specified values assume that the connector pair is correctly locked and is only disconnected for testing and maintenance purposes. If the connector is unlocked and exposed to ambient conditions and if there is a danger of contamination, the connector must be sealed using a protective cap \geq IP54.

Derating curve (for 3 x 4 mm² / 5 x 4 mm²) based on DIN EN 60512-5-2 (cable connector mounted)



Cable attenuation curve based on DIN EN 50289-1-6 (cable connector and panel mounting connector angled on base plate)



Contact chamber numbering (view of plug-in side)

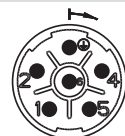
Number of positions

Male

Female

6-position (5+PE)

Crimp



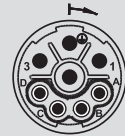
Pos. 3 *
leading



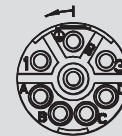
Pos. 3 *

8-position (4+3+PE)

Crimp



Pos. 2 *



Pos. 2 *
leading

* with
grounding contact